

Emergencies at Work

This Activity at a Glance

This Lesson is adapted from Youth @ Work, Lesson 4, by the Labor Occupational Health Program, UC Berkeley (www.lohp.org.)

In this activity students brainstorm examples of emergencies that could occur in a workplace. They play the "Disaster Blaster" board game in small groups to learn about what to do in various emergencies. And they learn about what should be included in every employer's Emergency Action Plan.

Learning Objectives

By the end of this lesson, students will be able to:

- List at least eight types of emergencies that can occur in a workplace.
- Explain what to do in at least three kinds of emergencies.
- Identify important information employers should provide about how to respond to workplace emergencies.

Materials Needed

- Student Handouts #1-3.
- One die for each table.
- Game pieces.
- Prizes.

Total Class Time: 50 minutes

Preparing To Teach This Lesson

Before you present this lesson:

- **1.** Review the components of the Emergency Action Plan (Handout #1.)
- **2.** For the Disaster Blaster game, copy Handout #2 (game board), one for each table of 4 students. Also copy Handout #3 (Disaster Blaster cards), one for each table, and cut out cards so that each table has one deck of 33 cards. Obtain game pieces, dice, and prizes, enough for each table.

Instructor's Notes

A. Introduction

(15 minutes)

1. Explain to the class that we are now going to talk about emergencies at work. Tell students that:

An emergency is any unplanned event that threatens employees, customers, or the public; that shuts down business operations; or that causes physical or environmental damage.

2. Tell students that emergencies may be natural or man-made.

Ask the class:

What are some examples of emergencies that occur in a workplace or that could affect the workplace?

Have students call out examples of emergency events while you write them on the board. Your list may include the following:

- Severe illness or injuryFiresFloods
- Hurricanes Tornadoes Earthquakes
- Power outages
 Chemical spills
 Explosions
- Toxic releases Terrorism Violence
- **3.** Distribute Handout #1 to the students. Tell the class that the best way to minimize the effects of an emergency is to know ahead of time what to do if that kind of emergency occurs and then practice the proper procedures. Few people can think clearly and logically in a crisis, so it is important to think through the proper procedures in advance, when you have time to be thorough and to practice. When you start a new job, your employer should tell you what kinds of emergencies could happen in that workplace and what procedures

you should follow to make sure you are safe. OSHA requires your employer to have an Emergency Action Plan which should include information on:

- What to do in different emergencies
- Where shelters and meeting places are
- Evacuation routes
- Emergency equipment and alert systems
- Procedures to follow when someone is injured or becomes ill
- Who is in charge during emergencies
- Your responsibilities
- Practice drills.

You should receive training about these things and participate in the practice drills. Now we will play a game to see how much you already know about what to do in different kinds of emergencies.

B. Disaster Blaster game

(30 minutes)

- **1.** Introduce the game. Explain that students will be paired up and will play a board game, called Disaster Blaster, against another pair of students at their table.
- **2.** Divide the class into groups of four students and assign each group a table. Have them split into two teams. Pass out a game board (Handout #2), game pieces, a die, and one deck of Disaster Blaster cards (Handout #3, cut into 33 cards) to each table.
- **3.** Explain the rules of the game. Tell students that the teams at each table should take turns rolling the die and moving ahead the number of spaces shown. Follow the instructions written on the spaces for moving around the game board. The arrows indicate the direction to move. When a team lands on a blank space, their turn is over.

Whenever a team's game piece lands on a Disaster Blaster square with a question mark (?), the opposing team picks a Disaster Blaster card from the top of the deck and reads the question on the card to the team whose turn it is. If that team's answer is basically correct, they move their game piece ahead one space. If they do not answer correctly, they remain on the square until their next turn. The opposing team should then read aloud the complete answer.

Explain that teams may not always know the "right" answer to a Disaster Blaster question, but should use their best judgment. They will learn correct answers while playing the game.

The team reaching the finish first, wins the game. They receive a prize.

4. Tell teams to begin playing the game. Visit tables to check that students understand the instructions. Distribute prizes to winning teams or play non-competitively and reward all with candy or other prizes. Safety supply companies or fire stations may donate stickers, pencils, erasers, etc. with safety slogans.

C. Conclusion

(5 minutes)

1. Tell students that this concludes our lesson on emergency preparedness. Remember that every workplace should have an Emergency Action Plan. The plan should include the following information and workers should be trained about it: who is in charge during an emergency; where the shelters and evacuation routes are; where the meeting places are; what procedures to follow when someone is injured; where first aid kits are; who has first aid training; and how and when practice drills will be conducted. Tell students they are entitled to this information whenever they start a new job.

Key Points: Emergencies at Work

- Every workplace should have an Emergency Action Plan.
- The plan should cover:
 - what to do in different emergencies
 - where shelters and meeting places are
 - evacuation routes
 - emergency equipment and alert systems
 - who's in charge
 - procedures to follow when someone is injured
- The plan should provide for practice drills.
- Workers should be trained on everything in the plan.

Student Handout #1 page 2

Emergency Action Plans

Planning ahead can reduce the effects of an emergency on workers, the workplace property, and the surrounding community. In preparing an Emergency Action Plan, an employer can figure out what protections are needed and what procedures should be followed in an emergency. All workplaces should have an Emergency Action Plan.

An Emergency Action Plan should be in writing. It should state who is responsible for coordinating emergency response; where chemicals are stored and where Material Safety Data Sheets (MSDSs) for these chemicals are kept; and how critical operations will be maintained during and after an emergency (if necessary). The plan should also list measures that will be taken to protect employees (including those with physical disabilities).

Training and drills

There should be training and regular practice drills so everyone knows what to do during different kinds of emergencies. Workers should be trained so they understand their responsibilities during an emergency; the alarm system and "all clear" announcements; where to gather during an emergency; how to report an emergency; what to do if there is a chemical spill; and when and how to use emergency equipment.

Alarm systems

These must be seen, heard, and understood by all employees.

Shelters and evacuation

The plan should designate inside shelters, exits, evacuation routes and procedures, and outside meeting places. Shelters inside the building should be identified if tornadoes or hurricanes are a possibility. Exits and evacuation routes should be checked periodically to be sure they are not blocked. Exits should be of sufficient number, width, and location that workers can rapidly evacuate. An outside meeting place should be designated so employees can be counted after evacuation.

Emergency lighting

Exit routes should have emergency lighting in all areas where work is performed after daylight hours.

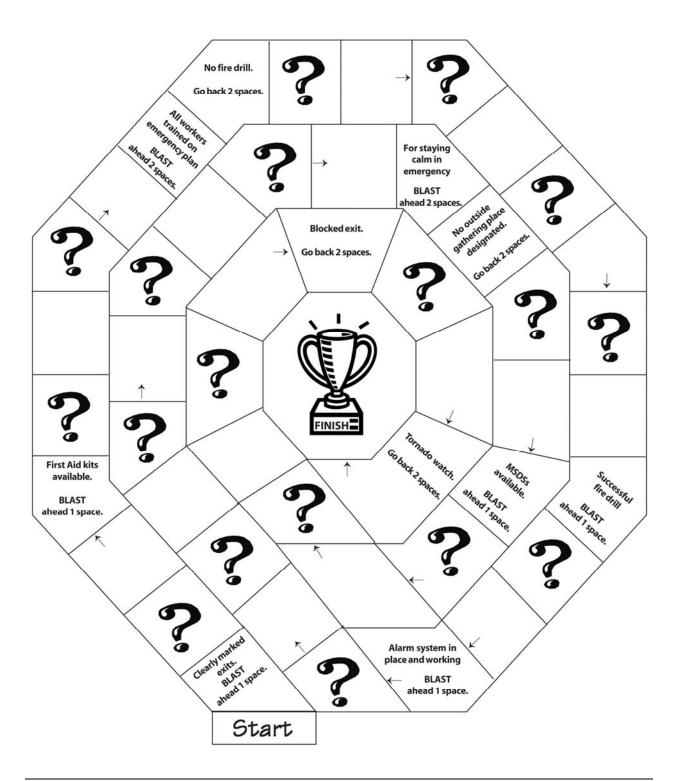
Emergency equipment

The plan should provide for installation and testing of appropriate emergency equipment such as building sprinkler systems, fire extinguishers, eyewash systems, and safety showers if chemicals are used.

Procedures to follow when someone is injured

First aid kits should be provided, as well as trained personnel to use them. Employees should know who is trained in first aid or CPR, and where to get medical attention if needed.

Disaster Blaster



Disaster Blaster Game Cards

 Q. If you are inside a building and begin to feel the shaking of an earthquake, what should you do? A. Get under something heavy or sturdy like a desk or doorframe. 	 Q. If you are in a building and hear a tornado warning, what should you do? A. Go to the lowest level of the building; the basement, a storm shelter, or an interior room without windows. 	Q. If you smell smoke and suspect a fire burning somewhere in the building, what should you do? A. Shut the door, get out of the building, and call the fire department from somewhere else.
 Q. If someone comes into your workplace with a gun, what should you do? A. Cooperate fully with the gunman's instructions, Don't try to be a hero. 	 Q. If an unknown chemical spills in your workplace, what should you do? A. Leave it alone and get your supervisor. 	A. Enough to allow for safe evacuation of all employees (and customers) but at least two exits.

Q. True or False? If you are caught in a fire you should stay close to the ground. A. True.	A. Pull the pin; aim the nozzle; squeeze the trigger; sweep the extinguisher back and forth over the fire.	Q. What phone number should you call to report an emergency? A. 911.
A. Apply pressure to the wound and, if there are no broken bones, elevate the wound above the heart. Seek medical help.	Q. What should you do for a very serious second or third degree heat burn? A. Call 911. Don't remove clothing if stuck to the burned area.	 Q. What should be used to put out a grease fire on a stove? A. A pan lid or baking soda. Never water or flour.
Q. What should you do if you are in a building and the power goes out? A. Stay calm. Look for and follow lighted exit signs.	Q. You are driving home from work. It is late and you are on a quiet country road. Your car breaks down. What should you do? A. Use your cell phone, if you have one, to call for help. Keep windows and doors locked and wait for police to arrive.	Q. You are working on a construction site and a co-worker enters a trench and passes out. What do you do? A. Tell a supervisor. Don't go after him; you may become a second victim.

Q. A co-worker slips on a slippery floor and hits his head, losing consciousness. What do you do? A. Don't move him because you may cause more damage. Call for help.	Q. If a co-worker falls off a ladder and injures his back, what should you do? A. Do not move him yourself (this can cause more damage), and call 911 for an ambulance.	A. Stop, drop, and roll; or smother the flames with a blanket. Never run.
Q. What is at least one factor that increases your risk of being robbed at work? A. Working alone; working at night; access to money.	Q. What letters are on the type of fire extinguisher that can be used in any kind of fire? A. A-B-C.	Q. What are the information sheets called that provide information about chemical products? A. Material Safety Data Sheets—MSDSs.
Q. What is at least one item that should be included in an emergency kit? A. Water; flashlight and batteries; first aid supplies.	Q. What does the skull and crossbones symbol mean? A. Poison.	Q. If a chemical gets into your eye, what should you do? A. Flush it with water for at least 15 minutes.

Student Handout #3 Page 4

Q. What is one security measure that can reduce the chance of workplace violence? A. Good lighting; a panic button or other communication device; a security guard; a video camera.	Q. Which is more hazardous, a sharp knife or a dull knife? A. A dull knife.	Q. What two common household cleaning products should you never mix? A. Ammonia and bleach because chlorine gas is released.
Q. If you hear a hurricane warning on the T.V. or radio it means that a hurricane is expected to reach land within how many hours? A. 24 hours.	 Q. If you are driving to work and see the funnel shape of a tornado approaching, what should you do? A. Get out of the car and lie down in a low place. 	Q. If you are working outside when a lightning storm starts and you can't get to shelter, what should you do? A. Crouch low to the ground, sit on the balls of your feet, stay away from trees and metal objects.
Q. Name at least two things that should be strapped down in your house or workplace to prepare for earthquakes. A. Heavy furniture; bookshelves; cupboards; refrigerator; water heater.	Q. What can you use to melt ice on the sidewalks in the winter? A. (Rock) salt.	Q. Name at least two things that should be in an Emergency Action Plan. A. Who is in charge; escape routes; training; drills; alarm systems; meeting place.